



AF  
BFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Serial No.: 09/735,930

In re Application of

Confirmation No. 5806

NAOMI NODA, et al.

Group Art Unit: 1754

Filed: December 14, 2000

Examiner: Stuart L. Hendrickson

For: CATALYST BODY

RESPONSE TO NOTICE OF NON-COMPLIANT APPEAL BRIEF

BOARD OF PATENT APPEALS AND INTERFERENCES  
U.S. PATENT AND TRADEMARK OFFICE  
P. O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In response to the Notice of Non-Compliant Appeal Brief (37 CFR 41.37), mailed May 25, 2007, and in accordance with MPEP 1205.03 and 37 CFR 41.37(c)(1)(v), attached is a corrected Section V. (Summary of Claimed Subject Matter), to replace the original Section V. of the Brief on Appeal filed April 20, 2007.

The PTO is hereby authorized to charge or credit any necessary fees to Deposit Account No. 19-4293.

Respectfully submitted,

STEPTOE & JOHNSON LLP

Roger W. Parkhurst  
Reg. No. 25,177  
C. Donald Stevens  
Reg. No. 53,638

Date: June 25, 2007

STEPTOE & JOHNSON LLP  
1330 Connecticut Ave., N.W.  
Washington, D.C. 20036  
(202) 429-6420

Attorney Docket No. 28953.7205

V. Summary of Claimed Subject Matter

Appellants' claimed invention is a catalyst body usable as an NOx adsorption catalyst. In recent years, as regulations for automobile exhaust gas have become more severe, lean burn engines and direct injection engines have been more widely used. Thus, NOx adsorption catalysts capable of effectively purifying the NOx present in an automobile exhaust gas under lean burn conditions have been put into practical use. Certain NOx adsorption components have been used in NOx adsorption catalysts, including examples of alkali metals, alkaline earth metals, and rare earth elements.

An NOx adsorption catalyst ordinarily includes (a) a carrier made of an oxide type ceramic material such as cordierite, or a metal material such as Fe--Cr--Al alloy, and (b) a catalyst layer containing a NOx adsorption component loaded on the carrier (a). The carrier, however, is easily corroded and deteriorated by alkali metals or some alkaline earth metals, especially, Li, Na, K and Ca, activated at the high temperatures of automobile exhaust gas. There is a serious problem that a cordierite ceramic carrier is susceptible to cracks and degradation because the oxide type ceramic easily reacts with such alkali and alkaline earth metals.

Independent claim 12 defines a catalyst body of the present invention to include a honeycomb carrier having at least one main component (Specification, p. 11, line 12 – p. 12, line 4), and a catalyst layer including an alkali metal (Specification, p. 3, lines 9-23), a heat-resistant inorganic oxide, and a noble metal loaded on the heat-resistant inorganic oxide (Specification, p. 6, line 22 – p. 7, line 18). The catalyst layer also includes an anchor substance that reacts

predominantly with the alkali metal rather than with a main component of the honeycomb carrier (Specification, p. 3, lines 9-23), and which is at least one of B, Si, P, S, Cl, V, Cr, Mn, Ga, Ge,

As, Se, Br, Zr, Mo, Sn, Sb, I and W (Specification, p. 4, lines 1-5), whereby any reaction between main components of the carrier and said alkali metal is suppressed and deterioration of the carrier is therefore suppressed (Specification, p. 3, lines 9-23).

Claim 14 specifies that the noble metal loaded on the heat-resistant inorganic oxide is Pt, Pd and/or Rh. (Specification, p. 7, lines 5-11.)

Claim 15 specifies that the main component of the carrier is cordierite. (Specification, p. 11, lines 20-27.)